

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEBRASKA

**OPERATION AND MAINTENANCE PLAN
IRRIGATION SYSTEM - TAILWATER RECOVERY**

Landowner/Operator _____

Job Location _____ GPS _____

County _____ NRD _____ Farm/Tract No. _____

Prepared By _____ Date _____

OPERATION AND MAINTENANCE ITEMS

This system was designed and installed to return runoff water from the irrigation system to a point where water can be reused for an irrigation supply. The life of this installation can be assured and usually increased by developing and carrying out a good operation and maintenance program. Operation and maintenance (O&M) is necessary for all conservation practices and is required for all practices installed with NRCS assistance. The landuser is responsible for proper O&M throughout the life of the practice and as may be required by federal, state, or local laws or regulations.

Operation is operating the practice in compliance with all laws, regulations, ordinances, and easements; and in such a manner that will result in the least adverse impact on the environment and will permit the practice to serve the purpose for which it was installed. Maintenance includes work to prevent deterioration of the practice, repairing damage, or replacing components, which fail.

Necessary operation and maintenance items for this practice include:

- ☐ Periodically inspect and maintain embankments and berms including controlling erosion and undesirable vegetation. Maintain vigorous growth of vegetative coverings. This includes reseeding, fertilizing, application of herbicides, and burning when necessary. Periodic mowing or controlled grazing may also be needed during the growing season to control excessive growth. Burning shall follow all state and local laws. Burning, mowing, grazing, and other O&M procedures shall be compatible with desired vegetation.
- ☐ If water is applied to a field(s) with different crops from which the tailwater was captured, insure that harmful pesticides or herbicides residuals are not contained within the water that might adversely effect the crops.
- ☐ Control aquatic vegetation, which restricts or hinders storage or outflow from the reservoir or pit. Follow all label restrictions, state, and federal laws related to pesticide/herbicide application.
- ☐ Control noxious weeds in accordance with state and local laws.
- ☐ Control field soil erosion to help minimize sediment deposits in tailwater facilities.
- ☐ Minimize erosion in collection ditches and pipeline inlets. Controlling erosion helps minimize sediment deposits in storage facilities, sumps, and low velocity pipelines and ditches.
- ☐ Periodically clean and re-grade collection facilities to maintain proper flow lines and functionality.
- ☐ Periodically remove sediment from traps and/or storage facilities to maintain design capacity and efficiency.

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- ❑ Prevent, and if necessary, remove crop residue and foreign debris from entering water conveyance facilities. Periodically check and remove debris as necessary from trash racks and structures to assure proper operation.
- ❑ Inspect and /or test pipelines and pumping plant components and appurtenances, as applicable. Periodically check all above-ground pipeline connections and structures for leaks and proper operation. Repair leaks immediately.
- ❑ Perform routine maintenance of all mechanical components in accordance with the manufacturer's recommendations. This may include performing motor and engine maintenance according to a fixed schedule based on hours of operation in addition to "as needed" maintenance based on observation.
- ❑ Maintain pumps, structures, storage facilities, conveyance pipelines, and ditches in good operating condition by performing O & M per site-specific recommendations for each component.
- ❑ If fences are installed, they shall be maintained to prevent unauthorized human or livestock entry.
- ❑ Immediately repair any vandalism, vehicular, or livestock damage to any earthfills, spillways, outlets, or other appurtenance.
- ❑ Eradicate or otherwise remove all rodents or burrowing animals and repair any damage caused by their activity.

Special Operation and Maintenance Requirements:_____

[illegible]